DOMINION RESOURCES INC /VA/ Form PX14A6G April 10, 2014 Memo

Subject: Grounds for a "FOR" vote for a resolution that Dominion should conduct a study examining the climate and

investment risks of biomass energy

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Contact: Kelly Bitov, Partnership for Policy Integrity

kbitov@pfpi.net

Shareholders are encouraged to vote FOR the following resolution:

Resolved: Shareholders request that the Board of Directors prepare a report by November 1, 2014, at reasonable cost and excluding proprietary information, evaluating the environmental and climate change impacts of the company using biomass as a key renewable energy and climate mitigation strategy, including an assessment of risks to the company's finances and operations posed by emerging public policies on biomass energy and climate change. The report should consider the impact that potential state or federal rejection of "carbon neutral" status for particular biomass energy facilities, fuel sources or categories of operations could have on subsidies, permitting processes, or existing facilities.

Purpose of the resolution:

The purpose of the resolution is to improve Dominion's disclosure of risks associated with its investments in carbon-intensive biomass energy (a technology that emits more carbon than fossil fuels). These include risks to the company from emerging climate-change related policies and legislation that may affect the viability of investments in biomass energy. In this memo, we discuss what these risks are and explain why Dominion's current disclosures are inadequate.

Rationale for a "For" vote: (an abstract of this memo)

Climate Risks of Biomass Power: Bioenergy is more carbon intensive than fossil fuels. Dominion's conversion of coal power plants to burn wood, as well as the company's other investments in biomass power, will increase present-day greenhouse gas emissions above what they would be if the facilities continued to burn coal. While carbon dioxide emissions from biomass power plants might be offset over time, such offsetting takes several decades and is contingent on many variables. The effect of biomass energy investments is thus to increase present-day greenhouse gas emissions.

Financial, Operational, and Reputational Risks of Biomass Power: The majority of Dominion's investments in renewable energy consist of wood-burning power plants and the financial viability of these investments depends on continued subsidies and tax credits for biomass as renewable energy. In turn, these subsidies and investments in part depend on the continued regulatory treatment of biomass energy as carbon neutral. Changes in policy occurring at the state and federal level suggest that biomass power may not maintain its favored status.

Dominion's Inadequate Disclosures of Climate and Financial Risks: Even though the SEC's Climate Guidance calls for disclosure of both climate risks caused by operations and risks to a company from climate-change related regulation and legislation,1 the Company's existing disclosures do not discuss the climate change-related risks of biomass investment.

- A detailed report submitted to the SEC on Dominion's failure to disclose climate and investment risks of biomass power is available at http://www.pfpi.net/wp-content/uploads/2013/11/PFPI-report-to-SEC-on-bioenergy-Nov-20-2013.pdf
- A letter from investors to the SEC asking that the SEC investigate Dominion and other companies' failures to disclose climate and investment risks of bioenergy is available at http://www.pfpi.net/wp-content/uploads/2013/11/Investor-letter-to-SEC-on-bioenergy-Nov-20-2013.pdf

Background

The Partnership for Policy Integrity (PFPI) is a Massachusetts-based environmental organization with expertise on biomass energy and its environmental and health impacts. We produce reports and provide scientific and legal expertise to citizens and policymakers on biomass energy facilities and on national, state and local biomass energy policies. In 2013, PFPI reviewed corporate disclosures by three energy companies with substantial biomass energy holdings, including Dominion, and found that discussion of environmental risks of biomass power was incomplete and misleading without inclusion of additional information. This analysis led to the November 2013 SEC report described above, and this shareholder proposal.

Climate Risks of Biomass Power

Biomass power plants burn wood and other biological materials that, like fossil fuels, contain carbon. However, biomass power plants typically emit about 150% as much carbon dioxide as coal plants, and 300-400% as much carbon dioxide as natural gas plants, per megawatt-hour of electricity generated, because biomass power plants are relatively inefficient.2

Biopower also increases atmospheric carbon dioxide levels because biomass fuel harvesting depletes forest carbon sinks and biomass power plant emissions far outpace re-uptake of carbon dioxide by forests. Numerous scientific studies3 have found that net carbon dioxide emissions from biomass power plants exceed emissions from fossil-fueled plants for 30-90 years4 due to this imbalance.

Dominion's public materials portray bioenergy as "carbon neutral" power, implying that emissions are less than from fossil fuel combustion and that bioenergy leads to a net reduction of greenhouse gas emissions. This representation is potentially false and misleading to investors, given the demonstrated carbon intensity of this technology. This representation also hides the carbon impacts of bioenergy from investors as bioenergy carbon emissions are not quantified in Dominion's existing disclosures.

Financial, Operational, and Reputational Risks of Biomass Power

Dominion has put most of its renewable energy eggs in the bioenergy basket. In its 2013 Integrated Resource Plan, Dominion describes its use of bioenergy as "extensive." Dominion's projections for energy generation from renewables in 2020 includes over 75% bioenergy, 3% solar, and 0% wind.6

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Yet bioenergy investments bring significant financial, operational and reputational risks. Generating power by burning wood is relatively expensive – according to EPA, the levelized cost of generating electricity from biomass in 2011 dollars per megawatt-hour is \$97 - \$130, whereas the cost of onshore wind is \$70 - \$97 and the cost of natural gas combined cycle technologies is \$59 - \$86, depending on the cost of gas.7 Bioenergy is relatively subsidy-dependent, as Dominion admitted in comments submitted to the Virginia State Corporation Commission.8 Subsidies and tax credits for bioenergy depend on the technology delivering environmental benefits. As the greenhouse gas, forest cutting, and conventional pollutant impacts of bioenergy are increasingly understood, subsidies and incentives are starting to be removed.

Certain states are eliminating renewable energy incentives for biomass energy. Massachusetts has already done so, and both Maryland and Washington DC, markets where Dominion collects renewable energy subsidies, are considering eliminating subsidies for bioenergy. In March 2014, the Vermont Public Service Board denied a certificate of public good for a biomass plant, on the basis of its greenhouse gas emissions. 9At the federal level, EPA is considering how to regulate greenhouse gas emissions from biomass energy under the Clean Air Act, having been advised by its Science Advisory Board that bioenergy can not be automatically considered carbon neutral.10 EPA's proposed power plant rule for CO2, although it does not regulate biomass power plants directly, counts CO2 from biomass that is co-fired at a coal plant toward the total calculation of carbon dioxide emissions.11

Overall, this regulatory trend represents both current and future financial and operational risks to the bioenergy industry, and Dominion's bioenergy investments.

Reputational risk includes negative public reaction to Dominion's "carbon neutral" messaging and bioenergy investment choices as the public comes to understand the harmful environmental and greenhouse gas impacts of bioenergy.

Dominion's Inadequate Disclosure of Climate and Financial Risks

None of the materials Dominion describes in its opposing statement - integrated resource plans, renewable portfolio standard progress reports, or website materials - disclose bioenergy climate risk to investors; neither do its SEC filings and its submittals to other agencies.

Dominion claims that analyses conducted for state regulatory proceedings that are posted to third party websites or are on file with state regulatory agencies contain the information requested by the Proposal, and therefore satisfy the company's obligations to inform its shareholders of material bioenergy risks. But these records do not provide investors with the company's assessment of bioenergy climate risks or describe how the company is managing these risks. At best, the records flag serious risks and then dismiss them. For example, Dominion stated in testimony to the Virginia State Corporation Commission that the economic viability of its three coal-to-biomass power plant conversions depended upon a regulatory assumption of carbon neutrality, and that without this regulatory assumption the net present value of operation of the plants would be less than if the plants continued to burn coal.12 The company does not explain, in that venue, how it is managing the very real risk of losing carbon neutral treatment.

Dominion's discussion of its "balanced approach" to renewables development is irrelevant to the risk analysis requested by the Proposal.

Dominion's focus on the "balanced" nature of its renewables development and omission of any reference to carbon emissions in its opposing statement highlights the need for the report requested by the Proposal. All renewable energy is not created equal. Bioenergy is both "renewable" and carbon-intensive, and this latter characteristic creates risk. While Dominion appears to be aware of this risk, the company has not disclosed it to shareholders, creating the need for this Proposal.

Conclusion

We believe Dominion faces significant financial, operational and reputational risks as a result of its carbon-intensive bioenergy investments. Dominion's bioenergy investments also exacerbate climate change. SEC policy and precedent requires Dominion to disclose these material climate change-related risks to investors, but Dominion has not done so. Dominion should be encouraged by shareholders to recognize, analyze and disclose these risks by a vote FOR this shareholder resolution.

- 1 The Commission formally recognized the materiality of climate change-related information in its 2010 Climate Guidance. Commission Guidance Regarding Disclosure Related to Climate Change (Release Nos. 33-9106; 34-61469; FR-82) February 2010. The Climate Guidance is an interpretive release that explains how existing disclosure requirements apply to climate change matters.
- 2 Dominion has admitted this fact in testimony, SCC Case No. PUE-2011-00073. Vol. III 01-12-2011.
- 3 Studies described in the report include: Walker, T., et al. Massachusetts Biomass Sustainability and Carbon Policy Study: Report to the Commonwealth of Massachusetts Department of Energy. Manomet Center for Conservation Sciences. 2010; Searchinger, T., et al. 2009. Fixing a critical climate accounting error. Science 326: 527-528; Colnes, A., et al. 2012. Biomass supply and carbon accounting for Southeastern Forests. Biomass Energy Resource Center, Montpelier, VT; Mitchell, S., et al. 2012. Carbon debt and carbon sequestration parity in forest bioenergy production. GCB Bioenergy (2012) doi:10.1111/j.1757-1707.2012.01173.x; McKechnie, J. et al. 2011. Forest bioenergy or forest carbon? Assessing trade-offs in greenhouse gas mitigation with wood-based fuels. Environmental Science and Technology, 45: 789-795.
- 4 Though biomass has been considered "net carbon neutral" for some time meaning that when the full lifecycle of biomass fuel is taken into account, biomass power plant carbon emissions would be balanced through atmospheric carbon sequestration by new tree regrowth current science demonstrates that in fact biomass power increases atmospheric carbon levels for decades, compared to fossil fuel plants.
- 5 Dominion Virginia Power's and Dominion North Carolina Power's Report of Its Integrated Resource Plan. Before the Virginia State Corporation Commission and North Carolina Utilities Commission. Case No. PUE-2013-00088, Docket No. E-100, Sub 137. Filed August 30, 2013.
- 6 Virginia Electric and Power Company d/b/a Dominion Virginia Power. Annual report to the State Corporation Commission on renewable energy. November 1, 2012.
- 7 40 CFR Parts 60, 70, 71, et al. Standards of Performance for Greenhouse Gas Emissions From New Stationary Sources: Electric Utility Generating Units; Proposed Rule. Federal Register Vol. 79, No. 5 Wednesday, January 8, 2014
- 8 See note 2, SCC Case No. PUE-2011-00073. Vol. III 01-12-2011.
- 9 State of Vermont Public Service Board, "Petition of North Springfield Sustainable Energy Project LLC, for itself and as agent for Winstanley Enterprises, LLC, for a certificate of public good", Docket No. 7833, order entered 2/11/14, petition denied.
- 10 In September 2011, the EPA submitted a draft of the Accounting Framework to the Science Advisory Board (SAB) Biogenic Carbon Emissions (BCE) Panel for peer review. The SAB BCE Panel delivered its Peer Review Advisory to the EPA on September 28, 2012. Letter from EPA's Science Advisory Board to the EPA, "SAB Review of EPA's Accounting Framework for Biogenic CO2 Emissions from Stationary Sources," September 28, 2012, available at http://yosemite.epa.gov/sab/sabproduct.nsf/0/2f9b572c712ac52e8525783100704886!OpenDocument&TableRow=2.3# 11 Proposed Rule establishing Standards of Performance for Greenhouse Gas Emissions From New Stationary Sources: Electric Utility Generating Units. 79 Fed. Reg. 1,429 (Jan. 08, 2014).
- 12 SCC Case No. PUE-2011-00073. Vol. III 01-12-2011, Direct Testimony of Glenn A. Kelly, Director of Generation System Planning for Dominion. Vol. II 06-27-2011, p. 13, Figure 7.